

50X1-HUM

SUPPLEMENT TO
REPORT NO.

THIS IS UNEVALUATED INFORMATION

REPORT OF THE SCIENTIFIC AND TECHNICAL SOCIETY
OF THE ALL-UNION CORRESPONDENCE POWER ENGINEERING INSTITUTE

Docent N. A. Melnikov,
Cand Tech Sci

In 1950, the NTO (Scientific and Technical Society) of the VZEI (All-Union Correspondence Power Engineering Institute) continued to expand its activities. At a general meeting of the society, Professor M. A. Gavrilov, Dr Tech Sci, read a report entitled "Automatics and Telemechanics; Its Present Status, Tasks, and Problems." The paper gave numerous examples of applications of automatics and telemechanics in many different branches of the economy and also shed light on the potentialities of this engineering field.

In 1950, the greatest number of reports were submitted at the meeting of the Electrical and Radio Engineering Section. Some of the more interesting are reported here. In his report, "The Electric Field of Long Lines," Docent A. I. Dolginov, Cand in Tech Sci, showed that although the field of a long line is not actually planar, the long-line equation still holds even in the most general case. Ya. M. Smorodinskiy, Cand Tech Sci, reported on "Filter Protection of Electric Transmission Lines." In his paper, "Investigation of the Insulation Resistance of Hydroelectric Generators," Engineer B. N. Tardov outlined the basic relationships governing the insulation resistance of generators and listed the formulas for calculation which he obtained.

A number of reports were read in the meetings of the Steam-Electric Power Engineering Section.

In the meetings of the Hydroelectric Power Engineering Section, papers were read by Professor V. G. Ayvaz'yan on "The Sevano-Zanginskiy Cascade of Hydroelectric Power Stations" and by Docent A. A. Stepankov, Cand Tech Sci, on "Economics of Hydroelectric Power Engineering."

CLASSIFICATION

CONFIDENTIAL

DISTRIBUTION

CLASSIFICATION		CONFIDENTIAL	
STATE	<input checked="" type="checkbox"/> NAVY	<input checked="" type="checkbox"/> NSRB	DISTRIBUTION
ARMY	<input checked="" type="checkbox"/> AIR	<input checked="" type="checkbox"/> FBI	

SECURITY INFORMATION
CONFIDENTIAL

50X1-HUM

Several papers were devoted to problems of scientific procedure. The paper of Docent M. K. Strugatskiy (of the General Technical Section) dealt with the contribution of the great Russian scientist M. V. Lomonosov to the development of natural science on the basis of the materialistic viewpoint. Docent A. I. Dolginov, Cand Tech Sci (Electrical and Radio Engineering Section), reported on the format of a course which he had developed in "High-Voltage Engineering." Another paper by Dolginov was based on the materialistic interpretation of the fundamentals of the theory of relativity.

The first scientific and technical conference of the VZNI was held toward the end of June 1950 at the initiative of the NTO. Twenty-five papers were read at this conference. In two plenary sessions the following reports were heard: Docent A. V. Koritskiy, Cand Tech Sci, on "The Pioneering Role of Russian Electrical Engineers in Power Engineering and Electric Machine Building"; Professor M. A. Gavrilov, Dr Tech Sci, "Automatics and Telemechanics in the USSR"; Docent V. B. Pakshver, Cand Tech Sci, "Problems of Remote Heat Supply"; Professor B. M. Tareyev, Dr Tech Sci, "Modern Achievements in Electrical Insulation Techniques"; and Docent R. V. Telesnin, "Atomic Energy and Its Use."

In two joint meetings of the Electric Power and Electrical Insulation sections, reports were read by Professor P. G. Grudinskiy on "Energy Losses in Electric Systems and Methods of Reducing Them," Docent A. A. Stepankov on "Fundamental Problems of the Economics of Hydroelectric Power Engineering," Docent A. I. Dolginov, Cand Tech Sci, on "Computation of the Lightning Resistance of Transmission Lines," Engineer S. M. Rozhanskiy on "Performance of the Insulation of Heavily Contaminated Open Distribution Units," Engineer B. N. Tardov on "Investigation of the Insulation Resistance of Generators," VZNI student S. G. Konstatinov on "Equipment for Recording Transient Processes Occurring in Electrical Systems During Arc Quenching," F. I. Zavalishin on "Oil-Wax Capacitors," and Yu. M. Gorskiy on "Appraisal of the Reliability of Circuit Wiring in Electric Systems by Means of the Theory of Probability."

The following papers were read at the joint meeting of the Electric Power and Electromechanical sections: Professor V. G. Ayzaz'yan, "The Most Economical Load Distribution Between Steam and Hydroelectric Power Stations of a Power System"; G. M. Ulanov, Cand Tech Sci, "The Priority of Soviet Scientists in the Development of the Theory of Automatic Regulation"; and Engineer V. G. Chaliy, "Electric Machine Voltage Regulators for Synchronous Generators."

At the meeting of the Electric Power Section, reports were submitted by Docent N. A. Mel'nikov, Cand Tech Sci, on "Designs of Transformer-Coupled Electric Systems," and Ye. A. Kostrova, on "Possibilities for the Use of Phase-by-Phase and Three-Phase Automatic Repeated Reclosing."

The members of the Electromechanical Section heard reports by Docent I. I. Petrov, Cand Tech Sci, on "New Methods for Heat Calculations of Electric Drives Under Cyclic Loads," and A. I. Shchukin, Cand Tech Sci, on "Processes in Electric Drive Follower Systems."

In two meetings of the Steam-Electric Power Engineering Section reports were given by Professor M. B. Kovich, Dr Tech Sci, Professor L. S. Eygenson, Dr Tech Sci, M. S. Shkrob, Dr Tech Sci, Docent V. B. Pakshver, Cand Tech Sci, and Professor B. M. Yakub, Dr Tech Sci.

The institute issued copies of abstracts of the reports presented at the conference. The first collection of the works of the VZNI is now in process of publication.

In the future the NTO (VZNI) plans to increase its activity in the field of scientific procedures, especially in seeing that party ideals are upheld in teaching and in fighting infiltration of reactionary bourgeois theories into classroom materials.

SECURITY INFORMATION

- 2 -

CONFIDENTIAL

SECURITY INFORMATION
CONFIDENTIAL **CONFIDENTIAL**

50X1-HUM

The general assembly of the members of the NTO (VZEI) elected a new presidium consisting of N. N. Andreyev, Corr Mem, Acad Sci USSR (chairman), Docent N. A. Mel'nikov, Cand Tech Sci (vice-chairman), and Ye. A. Kostrova, Cand Tech Sci (scientific secretary). The General Technical Section of the society was divided into two sections: the Mechanics and Mathematics Section and the Physics and Chemistry Section.

- E N D -

SECURITY INFORMATION

- 3 -

CONFIDENTIAL**CONFIDENTIAL**